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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,627	11/17/2000	Masakazu Hattori	04329.2460	8897

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EXAMINER

LE, MIRANDA

ART UNIT PAPER NUMBER

2177

DATE MAILED: 02/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/714,627

Applicant(s)

MASAKAZU HATTORI,
YOKOHAMA-SHI

Examiner

Miranda Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/17/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/2003 has been entered.

This communication is responsive to Amendment B, filed 12/12/2003.

Claims 1-14 are pending in this application. Claims 1, 12, 13, 14 are independent claims. In the Amendment B, claims 1, 12, 13, 14 have been amended. This action is made non-Final.

Drawings

2. The drawings were received on 12/12/2003. These drawings are not acceptable by the Draftsperson due to uncorrected sized pages. However, the drawings submitted 11/17/2000 have been approved by the Draftsperson as per attached PTO Form 948.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al. (US Patent No. 6,519,597).

Cheng anticipated independent claims 1, 12, 13, 14, by the following:

As to claims 1, 12, 13, Cheng teaches "A structured document search method for searching a structured document database, comprising: accepting a search request in the form of a logical structured document" at col. 5, lines 1-60, col. 3, lines 26-38, col. 22, lines 35-67;

"analyzing the accepted search request for generating a search graph" at col. 3, lines 42-63;

"generating a search plan (i.e. the search algorithm for a structure query) for a hierarchical structure (i.e. Fig. (a) and (b), col. 16) possessed by a searched document (col. 14, lines 1-28, col. 16, lines 22-55), in which a search processing procedure for said structured document database is developed from said search graph, by using index information concerning actual data (i.e. {(d1, 21, 28), (d1, 29, 36)...}) in said structured document database" at col. 8, lines 31-66, col. 22, lines 35-67, col. 7, lines 4-16, col. 13, lines 52-66;

"acquiring search results satisfying said search request by executing said search plan" at col. 15, lines 28-29, col. 16, lines 35-67, col. 17, lines 1-44, col. 22, lines 35-67.

As per claim 14, Cheng teaches "A structured document search system comprising: a logical structured document database containing an actual data" at col. 3, lines 26-37;

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“an index information storing section configured to store index information concerning the actual data in said logical structured document database” at col. 3, lines 56-59, col. 14, line 29 to col. 15, line 5;

“a search request accepting section configured to accept a search request from outside” at col. 18, lines 31-66;

“a search graph (i.e. a structure search) generating section configured to generate a search graph, based on said search request” at col. 16, line 8 to col. 17, line 26;

“a search plan (i.e. the path (structure) part “book/chapter” and the content part ‘XML’ and ‘HTML’) generating section configured to generate a search plan (i.e. the code describes the search algorithm for a structure query) for a hierarchical structure possessed by a searched document, in which a search processing procedure for said structured document database is developed from said search graph, by using index information concerning the actual data in said logical structured document database” at col. 16, line 8 to col. 17, line 44;

“a search plan executing section configured to acquire search results satisfying said search request by executing said search plan” at col. 22, line 36 to col. 23, line 39.

As per claim 2, Cheng teaches “in the generation of said search plan, an optimal search plan is generated by traversing said search graph, and by using effectively said index information” at col. 16, lines 9-34, Fig. 8.

As per claim 3, Cheng teaches “said search graph is traversed based on a strategy to evaluate preferentially the evaluatable partial graph (i.e. a path part) in said search graph” at col. 15, line 7, col. 17, lines 24-65.

As per claim 4, Cheng teaches “the search plan is executed after the completion of the generation of said search plan” at col. 22, lines 35-67.

As per claim 5, Cheng teaches “generation and execution of said search plan are performed alternately” at col. 16, lines 9-36, col. 23, line 4 to col. 24, line 24.

As per claim 6, Cheng teaches “said structured document database includes a hierarchical structure concerning element name and element value” at col. 16, lines 9-36, Fig. 11;

“said search request includes search conditions concerning said element name and said element value” at col. 16, lines 9-36, Figs. 11-12;

“said index information includes at least one of data creation index including information for specifying said element value creation position in said structured document database and element name occurrence index including information for specifying said element name creation position in said structured document database” at col. 16, lines 9-36, col. 13, lines 29-51.

As per claim 7, Cheng teaches “said element name occurrence index includes information indicating said element name creation position by a parent element one rank higher

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in hierarchy of the partial structure where said element name is generated” at col. 15, lines 6-57, col. 16, lines 9-59, Fig. 12.

As per claim 8, Cheng teaches “in the generation of said search plan, said search plan is generated by a plan generation rule, based on a plan generation rule base where a plurality of plan generation rules including information indicating rule application conditions and information indicating the search processing contents to compose said search plan are registered, applying the plan generation rule to the element of said search graph, and deciding a search processing included in the plan generation rule as one search processing constituting said search plan” at col. 14, lines 55-67;

“repeating selection and application of the plan generation rule and decision of the following search processing in said search plan, concerning said search graph element influenced by the results of application of said plan generation rule” at col. 15, lines 6-57.

As per claim 9, Cheng teaches “cost information decided by considering said index information is added to said plan generation rule” at col. 14, lines 29-54, col. 20, lines 21-65;

“the applicable plan generation rule is selected dynamically by taking account of said cost information” at col. 20, line 21 to col. 21, line 16.

As per claim 10, Cheng teaches “said plan generation rule can be arbitrarily registered or deleted in said plan generation rule base” at col. 12, line 15 to col. 13, line 26.

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As per claim 11, Cheng teaches "wherein said search graph is generated based on the syntax analysis results of the description of said search request, in the generation of said search graph" at col. 15, line 58 to col. 16, line 8.

Response to Arguments

5. Applicant's arguments regarding neither Okamoto et al. nor Harel et al., either alone or in combination disclose or suggest generating a search plan for a hierarchical structure possessed by a searched document, in which a search processing procedure for said structured document database is developed from said search graph, by using index information concerning actual data in said structure document database, as recited in amended claims 1 and 12-14, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 872-9306. The TC 2100's Customer Service number is (703) 306-5631.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Miranda Le
February 9, 2004



GRETA ROBINSON
PRIMARY EXAMINER